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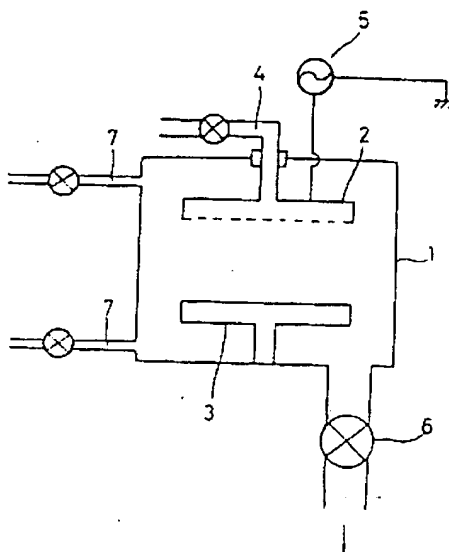
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APPLICANT : SANYO ELECTRIC CO LTD;

INVENTOR : MINAMI KOJI;

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TITLE : FILM FORMING VACUUM DEVICE



ABSTRACT : PURPOSE: To obtain the vacuum device capable of being efficiently cleaned by effectively introducing a cleaning gas into a vacuum vessel by providing ≥ 1 exclusive inlets for introducing the cleaning gas into the vacuum vessel capable of being kept at a reduced pressure.

CONSTITUTION: When amorphous silicon is formed, for example, a large amt. of the yellowish-brown deposit on the inner wall of the vacuum vessel 1, etc., is removed as follows. Namely, a cleaning gas contg. an interhalogen compd. such as ClF and ClF₃ or an inorg. fluoride such as BF₃ and NF₃ is diluted with gaseous Ar, etc., and introduced into the vessel 1 from the exclusive inlets 7. The pressure in the vessel 1 is kept at 10Torr, a substrate holder is heated to 200-300°C, the inner wall heater of the vessel 1 is kept at 200-300°C, the high-frequency power is controlled to 1W/cm², and cleaning is carried out for 1hr. The vessel 1 is then purged with gaseous H₂, and evacuation is repeated. As a result, the amorphous silicon and powdery product deposited on every part in the vessel 1 are completely removed.

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